



HYDRAIL SYSTEM

Cummins technology powers the Coradia iLint, the world's first hydrogen passenger train.



1,000
km range



300
passengers



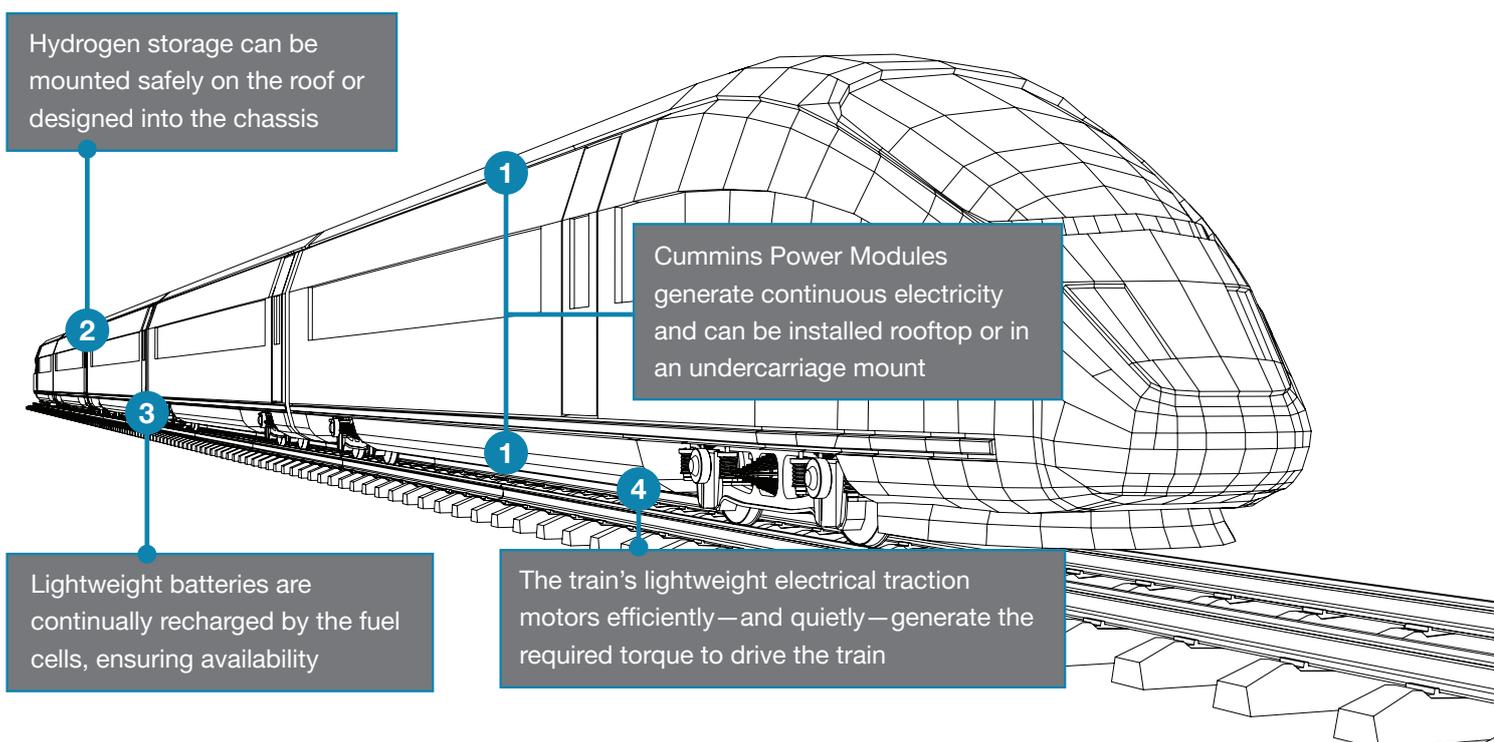
140
km/h

ANATOMY OF A HYDRAIL SYSTEM

Smarter, Cleaner, Quieter

- Reduced noise and vibration
- Fast refueling: less than 20 minute downtimes with 18+ hours of operation between fueling
- Ability to turn existing non-electrified railway lines into zero-emission lines, without costly long-range electrification infrastructure
- Lower maintenance and operating expenditures

Hydrail trains are driven by efficient electric motors – powered by high-output hydrogen fuel cells – an alternative to diesel combustion engines.



FUELING SUSTAINABLE OPPORTUNITIES

Hydrogen can be generated locally and emission-free, using renewable energy. Our market-leading electrolyzers generate hydrogen from water and electricity, often provided from off-peak surplus from solar, hydro-electric or wind installations - green energy that might otherwise be wasted. The hydrogen fueling infrastructure can also support fuel cell buses and trucks, reducing the dependence on fossil fuels for a variety of transportation applications.

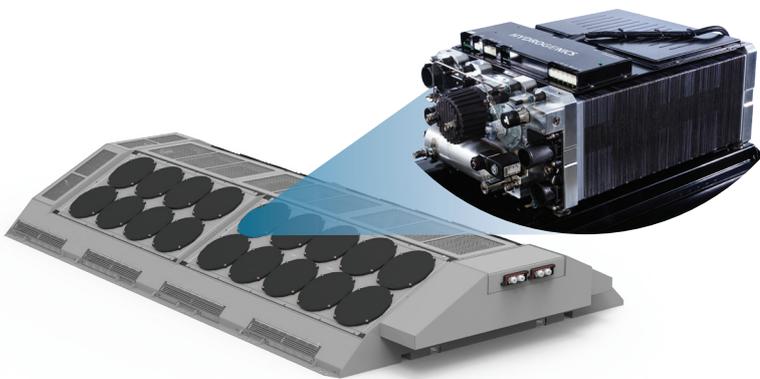
LONG-TERM PROJECTS DESIGNED FOR LONG-TERM SUCCESS

At Cummins, we've spent decades helping regional operators and vehicle integrators manage smooth transitions to hydrogen-powered transportation solutions, bringing our project experience to bear and building long-term support relationships. Over countless projects, we've provided our customers with the key ingredients for success: proven technology, focused execution, and committed customer service.



CUMMINS POWER MODULES: EASY INTEGRATION, PROVEN PERFORMANCE

Our Hydrail solutions were designed to scale flexibly for a wide range of rail applications, while providing the long runtimes, fast fueling (for shorter downtimes) and low maintenance that operators demand.



Our Hydrail MultiCell Modules combine our core cell stacks with sophisticated software for efficiency, reliability and durability, even in high-stress and subzero environments.



Multiple core fuel cell stacks are combined, sharing integrated cooling, ventilation and output regulation.